

REMARKS

Claims 34, 36-44, 47-50, 52-72, 74-76, 78, 80, 81, 83, 87-104, 106-113, 117, 120-123, 130-133, 135-138, 140-143, 147, 150-154 and 157-171 are pending. By this Amendment, claims 34, 36, 39, 42, 72, 74, 80, 104, 133 and 158 are amended, and claims 35, 73, 77, 82, 116 and 146 are cancelled. No new matter is added by the above amendments.

The independent claims have been amended to even more clearly distinguish over the applied references. In particular, independent claims 34, 72 and 158 have been amended to recite that a second mirror is connected to the irradiation apparatus (claims 34 and 72) or to the projection system (claim 158), and independent claims 104 and 133 have been amended to recite that a second mirror is connected to the second support structure. The independent claims also have been amended to recite that the position of the movable stage is detected by using, *inter alia*, the second mirror, with claims 72, 104 and 133 reciting that a measurement beam is directed to the first mirror, and a reference beam is directed to the second mirror. Please note that although previous claims 42 and 82 recited "a second mirror", more detail has been provided in the independent claims, as noted above.

Claims 34-41, 44, 52, 56, 59, 63, 66, 67, 70-78, 80, 81, 91, 92, 96, 99, 100, 102-104, 106, 109, 110, 112, 116, 130-133, 135, 138, 140, 142, 146 and 154 stand rejected under 35 U.S.C. §102(b) over U.S. Patent No. 4,891,526 to Reeds. This rejection is respectfully traversed.

Reeds does not disclose or suggest a second mirror connected to an irradiation apparatus as recited in independent claims 34 and 72, or a second mirror connected to the second support structure as recited in claims 104 and 133. It is believed that the Office Action recognizes this fact, in that claims 42 and 82, which, as noted above, recited a second mirror, were not included in this rejection.

In addition, Applicant respectfully submits that these claims are patentable over Reeds for at least all of the reasons previously argued by Applicant during prosecution of this application.

Withdrawal of the rejection based upon Reeds is requested.

Claims 34-44, 47-50, 52-56, 59-62, 71-78, 80-83, 87-96, 99, 100, 102-104, 106, 109, 110, 112, 116, 117, 120-123, 130-133, 135, 138, 146, 147, 150-154 and 157 stand rejected under 35 U.S.C. §102(e) over U.S. Patent No. 5,260,580 to Itoh et al. This rejection is respectfully traversed.

On page 8 of the August 19, 2003 Office Action, the Office Action states, with respect to the rejection of claim 42, that "the second mirror is inside the laser distance measuring device 51 [of Itoh et al.]...." Even if this is true, Itoh et al. does not disclose or suggest a second mirror connected to the irradiation apparatus as recited in independent claims 34 and 72, or a second mirror that is connected to the second support structure, as recited in independent claims 104 and 133. In addition, these claims are patentable over Itoh et al. for at least all of the reasons set forth in Applicant's previous responses.

Withdrawal of the rejection based upon Itoh et al. is requested.

Claims 57, 58, 97, 98, 107, 108, 136 and 137 stand rejected under 35 U.S.C. §103(a) over Itoh et al. This rejection is respectfully traversed. These claims are patentable over Itoh et al. for at least the reasons set forth above with respect to their corresponding independent claims. Withdrawal of the rejection is requested.

Claims 64, 68, 101, 111, 113, 141 and 143 stand rejected under 35 U.S.C. §103(a) over Reeds in view of U.S. Patent No. 4,585,337 to Phillips. This rejection is respectfully traversed. These claims are patentable for at least the reasons set forth above with respect to their corresponding independent claims. Withdrawal of the rejection is requested.

Claims 63, 65, 67 and 69 stand rejected under 35 U.S.C. §103(a) over Itoh et al. in view of Reeds, and vice versa. These rejections are respectfully traversed. These claims are patentable for at least the reasons set forth above with respect to their corresponding independent claims. Withdrawal of the rejections is requested.

Claims 158-171 stand rejected under 35 U.S.C. §103(a) over Itoh et al. alone, or optionally in view of U.S. Patent No. 5,150,153 to Franken et al. These rejections are respectfully traversed.

Neither Itoh et al. nor Franken et al. discloses or suggests the combination of features recited in independent claim 158, including, *inter alia*, a second mirror that is connected to the projection system and that is used by the position detector to detect the position of the object stage. As noted previously, even if element 51 of Itoh et al. includes an internal mirror, that mirror would not be attached to the projection system. Withdrawal of the rejections based upon Itoh et al. alone, or combined with Franken et al., is requested.

In view of the foregoing, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance of this application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,



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MAC/ccs

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Attachments:

Petition for Extension of Time
Request for Continued Examination

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